25

What is claimed is:

1. A method of analyzing electromagnetic interference developing in an LSI, comprising:

a correction step of correcting the amplitude of a current estimation waveform in each node which has been previously prepared for each change in each node, in accordance 5 with the probability of variation in each node;

an addition step of adding current waveforms of all nodes together within a period of time corresponding to one cycle, 10 provided that the thus-corrected current waveform appears at a time a signal arrives at each node; and

a frequency analysis step of analyzing the frequency of the current waveform calculated in the addition step.

- 2. The method of analyzing electromagnetic interference developing in an LSI according to claim 1, wherein the correction step includes a step of correcting the amplitude 15 of a current estimation waveform, which has been prepared for each change in each node, in accordance with the probability of variation in each node and a distribution with respect to time. 20
  - 3. The method of analyzing electromagnetic interference developing in an LSI according to claim 1, wherein each node has a plurality of signal transmission paths (hereinafter referred to simply as "paths"), and each of the current waveforms is calculated in consideration of a case where each

5

10

15

of the paths has a unique probability of change and signal arrival time.

- 4. The method of analyzing electromagnetic interference developing in an LSI according to claim 2, wherein each node has a plurality of paths, and each of the current waveform is calculated in consideration of a case where each of the paths has a unique probability of change and signal arrival time.
- 5.A method of analyzing electromagnetic interference developing in an LSI, the method comprising:

a waveform formation step of forming a current estimation waveform which has been prepared for each change in each node, as if the waveform randomly arises within a plurality of predetermined cycles, in accordance with the probability of change in each node and a time at which a signal arrives at each node;

adding the thus-prepared current estimation waveforms of all nodes, to thereby derive a current waveform; and

analyzing the frequency of the current waveform, thereby determining a noise characteristic of EMI.

- 6. The method of analyzing electromagnetic interference developing in an LSI according to claim 5, wherein each node has a plurality of paths, and a current waveform is calculated in consideration of a case where each of the paths has a unique probability of change and signal arrival time.
- 7. A method of analyzing electromagnetic interference

5

**10**.

15

developing in an LSI, the method comprising:

a waveform formation step of forming a current estimation waveform which has been prepared for each change in each node, as if the waveform randomly arises within a plurality of predetermined cycles, in accordance with the probability of change in each node and a distribution probability of time;

adding the thus-prepared current estimation waveforms of all nodes, to thereby derive a current waveform; and

analyzing the frequency of the current waveform, thereby determining a noise characteristic of EMI.

8. The method of analyzing electromagnetic interference developing in an LSI according to claim 7, wherein each node has a plurality of paths, and a current waveform is calculated in consideration of a case where each of the paths has a unique probability of change and signal arrival time.